

Amendments to the Drawings:

The attached sheet of replacement drawing includes changes to FIG. 1. The attached sheet for FIG. 1 replaces the original sheet and corrects for incorrect and/or missing information.

No new matter has been added.

Attachment: 1 Replacement Sheet

REMARKS

The Applicants respectfully traverse and request reconsideration. The Applicants wish to thank the Examiner for indicating that Claims 12, 13, 17 and 18 would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. Applicants have added the new claims 26, 27, 28, and 29 corresponding to rewritten independent versions of claims 12, 13, 17, and 18. Accordingly, applicants note that the new claims 26, 27, 28, and 29 have been allowed. Applicants also wish to thank the Examiner for the brief conversation on June 2, 2005, regarding how claims might be amended in response to the Final Office Action (OA).

Claims 1-3, 8-10 and 19-25 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Lee, U.S. Patent No. 6,507,366. Lee has been described in previous Office Action (OA) responses. Basically, Lee describes use of a pan/tilt controller to control motion of a camera having a zoom lens. (Abstract). Lee in FIG. 3 and associated text describes full image frames, e.g. in FIG. 3A box 330 "Detect Initial Image Frame" and box 340 "Detect Subsequent Image Frame", in contrast to the claim 1 language "a first portion of an image". It appears that in past Office Actions, the Examiner has associated the claim 1 language "a first portion of an image" with a full image frame, which is not the meaning assigned to "a first portion of an image" within the Application. Nevertheless, claims 1-4 have been canceled with amendments being made to the very similar claims 8-11, soon to be discussed. Also the system claim 5, corresponding to the method claim 1, and the dependent claim 6 depending on claim 5, have been canceled with amendments being made to the very similar claims 14-15, soon to be discussed. Claim 7 was dependent on claim 5 and has been amended to be dependent on Claim 14 instead, and will be discussed below.

Regarding claim 8, applicants have amended claim 8 from claiming “identifying a first portion of an image” to claiming “receiving input data identifying a first zoom portion of a full frame of an image”. This change in language is supported in the specification at least in the Background paragraphs, the bottom paragraph of page 7, FIG. 2, the two paragraphs before the ending paragraph on page 9, and the last paragraph on page 12. Pages 7 and 8 refer to “full frame” and “full image” as being the same reference number 102, and thus these terms are referring to the same thing.

Claim 8 has also been amended from claiming “displaying the first portion in a zoom frame within a full frame of the image” to claiming “displaying the identified first zoom portion in a first zoom frame”. This change in language is supported in the specification in the first paragraph of the Background, the 3rd paragraph of page 8, and the last paragraph on page 9.

Claim 8 has also been amended from claiming “detecting motion of an object within the zoom frame” to claiming “detecting motion of an object within the first zoom frame”. This change in language is supported in the specification in the paragraphs on page 10 and the top of page 13.

Claim 8 has also been amended from claiming “selecting a second portion of the image such that the object appears at least a predetermined distance from an edge of the second portion of the image” to claiming “selecting a second zoom portion of a full frame of the image such that the object appears at least at a predetermined distance from an edge of the second zoom portion of the image”. This change in language is supported in the specification at least in the paragraph at the top of page 13, the paragraphs at the bottom and top of pages 10-11, and by the last sentence of page 11.

Claim 8 has also been amended from claiming “displaying the second portion in the zoom frame” to claiming “displaying the second zoom portion in a second zoom frame”. This change in language is supported in the specification at least in the first paragraph of the Background, the 3rd paragraph of page 8, and the last paragraph on page 9.

In the Office Action, the Examiner rejects claim 8 as being anticipated by Lee, stating “Considering claim 8, see rejection of claim 1”. Regarding claim 1, and thereby addressing claim 8, the office action alleges that the claim 1 language “identifying a first portion of an image” is met by step 330 of figure 3A of Lee, which states “detect initial image frame”. The claim 1 language has been amended to “receiving input data identifying a first zoom portion of a full frame of an image”. Contrasting this amended claim language to step 330 of FIG. 3A of Lee, Lee does not indicate “receiving input data identifying a first zoom portion of a full frame of an image”, but rather states at step 330 “detect initial image frame”.

Regarding claim 1, the office action alleges that the claim 1 language “displaying the first portion, and displaying the second portion”, is met by FIG. 5 which, for example, is alleged to show position of the object on the screen. However, as best as can be determined by the applicants, FIG. 5 of Lee does not show position of any object on a screen. Rather, FIG. 5 shows a center that appears to depict the central area in front of the lens of a camera with the surrounding regions I, II, III surrounding the center. The actual amended claim language of Claim 8 states “displaying the identified first zoom portion in a first zoom frame” and “displaying the second zoom portion in a second zoom frame”. In contrast, Lee does not indicate this amended claim language, but is alleged to show an “object” in FIG. 5. Applicants do not see any apparent object in FIG. 5 of Lee, but rather a center surrounded by regions. Applicants respectfully reassert the relevant remarks of past responses regarding FIG. 5.

Regarding claim 1, the office action alleges that the claim 1 language “detecting motion of an object within the portion of the image” is met by ‘Is Motion Vector Detected’ of step 350, FIG. 3A. The actual amended claim language of Claim 8 states “detecting motion of an object within the first zoom frame”. In contrast, Lee does not indicate this amended claim language, but cites block 350 which states ‘Is Motion Vector Detected’. Applicants respectfully reassert relevant remarks of previous responses with regard to ‘Is Motion Vector Detected’ as referring to the motion of a frame, not to “detecting motion of an object within the first zoom frame”.

Regarding claim 1, the office action alleges that the claim 1 language “selecting a second portion of the image such that the object appears at least a predetermined distance from an edge of the second portion of the image” is met by FIG. 3A, at step 340 ‘detect subsequent image frame’ and also at step 360 ‘tracking object’. The actual amended claim language of Claim 8 states “selecting a second zoom portion of a full frame of the image such that the object appears at least at a predetermined distance from an edge of the second zoom portion of the image”. In contrast, Lee does not indicate this amended claim language, but cites steps in FIG. 3A stating ‘detect subsequent image frame’ and ‘tracking object’. Applicants also wish to reassert the relevant remarks of previous responses regarding the claim limitation of amended claim 8, e.g. nowhere within Lee is it apparent that “the object appears at least at a predetermined distance from an edge of the second zoom portion”.

Applicants believe the fully supported amendment of claim 8 places amended claim 8 in condition for allowance. Therefore, Applicants respectfully assert that claim 8, as amended, is in condition for allowance and respectfully request amended claim 8 be allowed.

As to amended claim 9 applicants respectfully submit that this claim is also allowable due to additional novel and non-obvious subject matter provided by this claim, and because this

claim depends directly on base claim 8. The claim language of claim 2 is analogous to claim 9. The office action alleges the claim language of claim 2 “when at least one edge of the second portion of the image extends beyond the image, terminating the zoom mode” is met by Lee in column 7, lines 1-6, for example, wherein it is stated “if it is judged that no more zooming can be performed while the object is not included in the effective region (to be described below), the zoom/focus controller 6 recognizes that the object is beyond the tracking range of the zooming operation, and controls the process to return to step 310 of the initial state (step 371C).” However, nowhere within this cited portion does the claim language “when at least one edge of the second portion of the image extends beyond the image, terminating the zoom mode” appear. In contrast, the cited portion refers to the object not being included in the effective region to be described below. The effective region appears to be described in column 7, beginning at line 34, which states “it is judged whether the object is included in the effective region. ... The effective region includes the region where the screen object actually exists. The magnitude of the effective region should be set to be equal to or smaller than the size of the screen.” An example is then illustrated by FIGURE 6. Nowhere within this cited portion or within FIGURE 6 of Lee does the claim language “one edge of the second portion of the image extends beyond the image” appear.

Nevertheless, the claim language of claim 9 has been amended to read as “when at least one edge of the second zoom frame of the image extends beyond the full frame of the image, terminating the zoom mode.” Claim 9 has further been amended to remove “a step of” in the preamble for further clarification. For at least the reasons above, among other things, the Applicants respectfully assert amended claim 9 is in condition for allowance, and respectfully request amended claim 9 be allowed.

As to amended claim 10 applicants respectfully submit that this claim is also allowable due to additional novel and non-obvious subject matter provided by this claim, and because this claim depends directly on base claim 8. The OA cites “Regarding claim 10, see rejection of claim 2”. Thus, the Office alleges that the claim language of claim 10 “measuring a difference between the first portion of the image and the second portion of the image” is met by Lee in column 7, lines 1-6, for example, wherein it is stated “if it is judged that no more zooming can be performed while the object is not included in the effective region (to be described below), the zoom/focus controller 6 recognizes that the object is beyond the tracking range of the zooming operation, and controls the process to return to step 310 of the initial state (step 371C).” No mention of “measuring a difference between the first portion of the image and the second portion of the image” is mentioned within this cited portion or, as best as can be determined by the Applicants, any other portion of Lee.

Nevertheless, the claim language of claim 10 has been amended to specify a first zoom portion and a second zoom portion. Claim 10 has further been amended to remove “a step of” in the preamble for further clarification. For at least the reasons above, among other things, the Applicants respectfully assert amended claim 10 is in condition for allowance, and respectfully request amended claim 10 be allowed.

Regarding claims 19-25, the OA has rejected these claims for the same reasons provided for rejecting claim 1 and claim 8. As to amended claims 19 and 20, applicants respectfully submit that these claims are allowable due to additional novel and non-obvious subject matter provided by these claims, and because these claims depend directly on base claim 8. Claim 21 is an independent claim with claim language amended to correspond to the amended language of claim 8. Applicants respectfully reassert the relevant remarks made for the allowability of

amended claim 8 for amended claim 9. Applicants respectfully assert that amended claim 21 is in condition for allowance, and respectfully request claim 21 be allowed. Claims 22-25 have been amended and depend on base claim 21. Applicants respectfully submit that these amended claims are allowable due to additional novel and non-obvious subject matter provided by these claims, and because these claims depend directly on base claim 8.

Accordingly, Applicants respectfully submit that the amended claims 8-10 and 19-25 are not anticipated under 35 U.S.C. 102(e) by Lee, and respectfully request these amended claims be allowed for the reasons provided above, among other things.

The Office Action rejects claims 4 and 11 under 35 U.S.C. 103(a) as being unpatentable over Lee. Claim 4 is canceled not as a result of the OA rejection, but due to incorporation of claim 4 language into amended claim 11. The OA rejects claim 11 for the same reason that the OA rejects claim 4. The OA alleges the claim language of amended claim 11 “wherein the first zoom portion of the image and the second zoom portion of the image are MPEG2 images; and wherein the detecting motion of the object within the first zoom frame includes examining MPEG2 motion vectors” being obvious from Lee. However, Lee does not disclose or suggest first and second zoom portions, the zoom portions being portions of a full frame of an image, according to the amended language of claim 11. In contrast, Lee in FIG. 3A corresponding states in steps 330, 340, 350, and 360 the language “Detect Initial Image Frame”, “Detect Subsequent Image Frame”, “Is Motion Vector Detected”, and “Tracking Object”. These steps as well as the disclosed related text of Lee refers to a frame or, as termed in the application, a “full frame” or “full image”. Any detecting of motion and tracking of an object within Lee is with respect to a frame. The language of amended claim 11 depends on claim 8 which states “the first zoom portion of a full frame” and “the second zoom portion of a full frame”.

Therefore, the portions referred to in the claim language are zoom portions of a full frame in which motion of an object is detected and tracked. Nowhere within Lee does Lee, within the FIGs. of Lee or within the text of Lee, does Lee disclose or suggest portions of a full frame of an image, let alone detecting motion of an object and tracking the motion of an object within portions of a full frame of an image. For at least the above reasons, among other things, Applicants respectfully submit that Lee does not disclose or suggest the claim language of amended claim 11. Accordingly, Applicants respectfully submit that claim 11 is patentable over Lee, and respectfully request that claim 11 be allowed.

The OA rejects claims 5-7 and 14-16 under 35 U.S.C. 103(a) as being unpatentable over Tamir et. al. (U.S. Patent No. 5,923,365) in view of Lee. Tamir has been described in previous OA responses.

Regarding claim 5, claim 5 is canceled not as a result of the OA rejection, but due to incorporation of claim 5 language into amended claim 14. The OA rejects claim 14 for the same reason that the OA rejects claim 5. The OA admits on page 7 that Tamir does not disclose the limitation claimed in 5(d), this limitation stated in amended claim 14 as “while all edges of the selected first zoom portion of the video image are within the full frame of the video image, to zoom to the selected first zoom portion of the video image and display in a first zoom frame, to detect movement of an object within the first zoom frame, and to select a second zoom portion of the video image to redefine the selected first zoom portion of the video image and display in a second zoom frame”. The Applicants reassert for claim 14 the above relevant remarks made for claim 11 not being disclosed or obvious in view of Lee, the relevant remarks arguing that Lee does not disclose or suggest first and second zoom portions, the first and second zoom portions being portions of a full frame of an image. The claim language of claim 14 states that “all edges

of the selected first zoom portion of the video image are within the full frame of the video image” wherein the selected first zoom portion is “a first zoom portion of a full frame of the video image”. Nowhere within Lee does Lee disclose or suggest a first zoom portion of a full frame of a video image, let alone “all edges” of the selected first zoom portion. As admitted by the OA, this claim language is not disclosed or suggested by Tamir, and as argued above, is not disclosed or obvious from Lee.

Accordingly, Applicants respectfully submit that the claim language of claim 14 is not disclosed or obvious from either Tamir or Lee, alone or in combination, for at least the above reasons, among other things. Applicants respectfully submit that amended claim 14 is patentable over Tamir in view of Lee. Applicants respectfully submit that amended claim 14 is in condition for allowance and respectfully request amended claim 14 be allowed.

The Office Action rejects claims 6 and 15 under 35 U.S.C. 103(a) as being unpatentable over Tamir in view of Lee. Claim 6 is canceled not as a result of the OA rejection, but due to incorporation of claim 6 language into amended claim 15. The OA rejects claim 15 for the same reason that the OA rejects claim 6. The OA alleges the claim language of amended claim 15 “wherein the video signal processor is further operative to determine a difference between the first zoom portion of the video image and the second zoom portion of the video image, and to cancel zoom in response to the difference exceeding a predetermined threshold” is obvious over Tamir in view of Lee. The Applicants respectfully wish to note that the claim language is “first zoom portion ... and second zoom portion” and respectfully reassert for amended claim 15 the above relevant remarks made for claim 14. For at least the reasons provided in support of the non-obviousness of claim 14, among other things, Applicants respectfully submit amended claim

15 is patentable over Tamir in view of Lee. Accordingly, Applicants respectfully request amended claim 15 be allowed.

As to amended claim 7, Applicants respectfully submit that this claim is allowable due to additional novel and non-obvious subject matter provided by this claim, and because this claim depends directly on base claim 14.

The Office Action rejects claim 16 under 35 U.S.C. 103(a) as being unpatentable over Tamir in view of Lee. The Applicants respectfully wish to note that the claim language is “first zoom portion ... and second zoom portion” and respectfully reassert for amended claim 16 the above relevant remarks made for claim 15. For at least the reasons provided in support of the non-obviousness of claim 15, among other things, Applicants respectfully submit amended claim 16 is patentable over Tamir in view of Lee. Accordingly, Applicants respectfully request amended claim 16 be allowed.

Claims 12, 13, 17, and 18 have been rewritten in independent form as new claims 26-29, and thus claims 26-29 are allowable according to the Office Action. However, claims 12, 13, 17, and 18 have been amended and Applicants respectfully submit that these dependent claims are also allowable due to additional novel and non-obvious subject matter provided by these claims, and because these claims depend either directly or indirectly on amended base claims that are respectfully asserted as being in condition for allowance. Accordingly, Applicants respectfully request that amended claims 12, 13, 17, and 18 also be allowed.

Accordingly, Applicants respectfully submit that the claims 7-29 as now amended are in condition for allowance and that a timely Notice of Allowance be issued in this case. The examiner is invited to contact the below-listed attorney if the examiner believes that a telephone conference will advance the prosecution of this Application.

Respectfully submitted,

Dated: June 6, 2005

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